



!FW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Jan G. Jaworski et al.                      Art Unit : 1638  
Serial No. : 10/758,524                                      Examiner : Unknown  
Filed : January 15, 2004  
Title : FATTY ACID ELONGASE 3-KETOACYL COA SYNTHASE POLYPEPTIDES

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL

The following correspondence relating to this application is enclosed for filing:

1. Information Disclosure Statement (1 page);
2. Form PTO-1449 (3 pages); and
3. A Return Postcard.

Please date stamp and return the enclosed postcard. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: August 10, 2004

M. Angela Parsons  
M. Angela Parsons, Ph.D.  
Reg. No. 44,282

Fish & Richardson P.C., P.A.  
60 South Sixth Street  
Suite 3300  
Minneapolis, MN 55402  
(612) 335-5070 telephone  
(612) 288-9696 facsimile

60235864.doc

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

August 10, 2004  
Date of Deposit  
Signature [Signature]

Lisa M. Becker  
Typed or Printed Name of Person Signing Certificate



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Jan G. Jaworski et al.                      Art Unit : 1638  
Serial No. : 10/758,524                                      Examiner : Unknown  
Filed : January 15, 2004  
Title : FATTY ACID ELONGASE 3-KETOACYL COA SYNTHASE POLYPEPTIDES

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicants submit the references listed on the attached form PTO-1449.

Under 35 USC §120, this application relies on the earlier filing date of U.S. Application No. 09/877,476, filed on June 8, 2001. All of the references were submitted to and/or cited by the Office in the prior application and, therefore, are not provided in this application.

This statement is being filed before the receipt of a first Office Action on the merits.  
Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: August 10, 2004

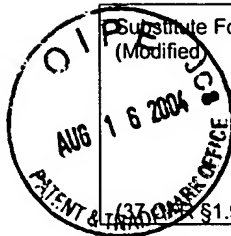
M. Angela Parsons  
M. Angela Parsons, Ph.D.  
Reg. No. 44,282

Fish & Richardson P.C., P.A.  
60 South Sixth Street  
Suite 3300  
Minneapolis, MN 55402  
Telephone: (612) 335-5070  
Facsimile: (612) 288-9696  
60235753.doc

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

August 10, 2004  
Date of Deposit  
Signature [Signature]  
Lisa M. Becker  
Typed or Printed Name of Person Signing Certificate


 Substitute Form PTO-1449  
(Modified)

 U.S. Department of Commerce  
Patent and Trademark Office

 Attorney's Docket No.  
07148-108002

 Application No.  
10/758,524

**Information Disclosure Statement  
by Applicant**

(Use several sheets if necessary)

 Applicant  
Jan G. Jaworski et al.

 Filing Date  
January 15, 2004

 Group Art Unit  
1638

(37 CFR 1.98(b))

**U.S. Patent Documents**

Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	6,051,756	04/18/00	Chen et al.			
	AB	6,124,524	09/26/00	James, Jr. et al.			

**Foreign Patent Documents or Published Foreign Patent Applications**

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AC	WO 95/15387	06/08/95	PCT				
	AD	WO 96/13582	05/09/96	PCT				
	AE	WO 98/46766	10/22/98	PCT				
	AF	WO 98/54954	12/10/98	PCT				
	AG	WO 01/29238	04/26/01	PCT			Abstr.	

**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
	AH	GenBank Accession No. U29142
	AI	GenBank Accession No. U50771
	AJ	GenBank Accession No. AF009563
	AK	GenBank Accession No. AAA70154
	AL	GenBank Accession No. AAA96054
	AM	GenBank Accession No. AAB72178
	AN	GenBank Accession No. AAD22309
	AO	GenBank Accession No. CAA71898
	AP	GenBank Accession No. CAB36702
	AQ	"1999 Biochemistry and Molecular Biology of Plant Fatty Acids and Glycerolipids Symposium," <u>National Plant Lipid Cooperative</u> , June 9-13, 1999, South Lake Tahoe, California, P12
	AR	Barret et al., "A rapeseed <i>FAEI</i> gene is linked to the E1 locus associated with variation in the content of erucic acid," <u>Theor. Appl. Genet.</u> , 1998, 96:177-186
	AS	Broun et al., <u>Science</u> , 1998, 282:131-133
	AT	Clemens and Kunst, "Isolation of a <i>Brassica napus</i> cDNA (Accession No. AF009563) Encoding 3-Ketoacyl-CoA Synthase, a Condensing Enzyme Involved in the Biosynthesis of Very Long Chain Fatty Acids in Seeds," <u>Plant Physiol.</u> , 1997, 115:313-314

Examiner Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 07148-108002	Application No. 10/758,524
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)		Applicant Jan G. Jaworski et al.	
		Filing Date January 15, 2004	Group Art Unit 1638
(37 CFR §1.98(b))			

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AU	Domergue et al., "Purification of the Acyl-CoA Elongase Complex from Developing Rapeseed and Characterization of the 3-Ketoacyl-CoA Synthase and the 3-Hydroxyacyl-CoA Dehydratase," <u>Lipids</u> , 2000, 35(5):487-494
	AV	Fiebig et al., "Alterations in <i>CER6</i> , a Gene Identical to <i>CUT1</i> , Differentially Affect Long-Chain Lipid Content on the Surface of Pollen and Stems," <u>Plant Cell</u> , 2000, 12:2001-2008
	AW	Fourmann et al., "The two genes homologous to <i>Arabidopsis FAE1</i> co-segregate with the two loci governing erucic acid content in <i>Brassica napus</i> ," <u>Theor. Appl. Genet.</u> , 1998, 96:852-858
	AX	Ghanevati and Jaworski, "Active-site residues of a plant membrane-bound fatty acid elongase $\beta$ -ketoacyl-CoA synthase, FAE1 KCS," <u>Biochim. Biophys. Acta</u> , 2001, 1530:77-85
	AY	Ghanevati, "Engineering and Mechanistic Studies of Fatty Acid Elongase1 $\beta$ -Ketoacyl-CoA Synthase, FAE1 KCS," A Dissertation, submitted to the Faculty of Miami University, Oxford, Ohio, 2000
	AZ	Han, " $\beta$ -Ketoacyl-CoA Synthase Gene from <i>Brassica napus</i> L.: Functional Characterization and Promoter Analysis," A Dissertation, submitted to the University of Hamburg, Hamburg, 1999
	AAA	Han et al., "Functional characterization of $\beta$ -ketoacyl-CoA synthase genes from <i>Brassica napus</i> L.," <u>Plant Mol. Biol.</u> , 2001, 46:229-239
	ABB	James, Jr., et al., "Directed Tagging of the <i>Arabidopsis FATTY ACID ELONGATION1 (FAE1)</i> Gene with the Maize Transposon <i>Activator</i> ," <u>Plant Cell</u> , 1995, 7:309-319
	ACC	Kunst et al., "Fatty acid elongation in developing seeds of <i>Arabidopsis thaliana</i> ," <u>Plant Physiol. Biochem.</u> , 1992, 30(4):425-434
	ADD	Lassner et al., "A Jojoba $\beta$ -Ketoacyl-CoA Synthase cDNA Complements the Canola Fatty Acid Elongation Mutation in Transgenic Plants," <u>Plant Cell</u> , 1996, 8:281-292
	AEE	Millar and Kunst, "Very-long-chain fatty acid biosynthesis is controlled through the expression and specificity of the condensing enzyme," <u>Plant J.</u> , 1997, 12(1):121-131
	AFF	Millar et al., "Accumulation of Very-Long-Chain Fatty Acids in Membrane Glycerolipids Is Associated with Dramatic Alterations in Plant Morphology," <u>Plant Cell</u> , 1998, 11:1889-1902
	AGG	Millar and Kunst, "The natural genetic variation of the fatty-acyl composition of seed oils in different ecotypes of <i>Arabidopsis thaliana</i> ," <u>Phytochemistry</u> , 1999, 52:1029-1033
	AHH	Millar et al., " <i>CUT1</i> , an <i>Arabidopsis</i> Gene Required for Cuticular Wax Biosynthesis and Pollen Fertility, Encodes a Very-Long-Chain Fatty Acid Condensing Enzyme" <u>Plant Cell</u> , 1999, 11:825-838
	AII	Post-Beittenmiller, "Biochemistry and Molecular Biology of Wax Production in Plants," <u>Annu. Rev. Plant Physiol. Plant Mol. Biol.</u> , 1996, 47:405-430
	AJJ	Pruitt et al., "FIDDLEHEAD, a gene required to suppress epidermal cell interactions in <i>Arabidopsis</i> , encodes a putative lipid biosynthetic enzyme," <u>Proc. Natl. Acad. Sci. USA</u> , 2000, 97(3):1311-1316
	AKK	Roscoe et al., "Mutations in the <i>fatty acid elongation 1</i> gene are associated with a loss of $\beta$ -ketoacyl-CoA synthase activity in low erucic acid rapeseed," <u>FEBS Letters</u> , 2001, 492:107-111
	ALL	Tillman and Bell, <u>J. Biol. Chem.</u> , 1986, 261:9144-9149
	AMM	Todd et al., " <i>KCS1</i> encodes a fatty acid elongase 3-ketoacyl-CoA synthase affecting wax biosynthesis in <i>Arabidopsis thaliana</i> ," <u>Plant J.</u> , 1999, 17(2):119-130
	ANN	Van de Loo et al., "An oleate 12-hydroxylase from <i>Ricinus communis</i> L. is a fatty acyl desaturase homolog," <u>Proc. Natl. Acad. Sci. USA</u> , 1995, 96:6743-6747

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 07148-108002	Application No. 10/758,524
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))		Applicant Jan G. Jaworski et al.	
		Filing Date January 15, 2004	Group Art Unit 1638

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AOO	Venkateswari et al., "Molecular Cloning and Characterization of <i>FATTY ACID ELONGATION I (BjFAEI)</i> Gene of <i>Brassica juncea</i> ," <u>J. Plant Biochem. Biotech.</u> , 1999, 8:53-55
	APP	Yephremov et al., "Characterization of the FIDDLEHEAD Gene of Arabidopsis Reveals a Link between Adhesion Response and Cell Differentiation in the Epidermis," <u>Plant Cell</u> , 1999, 11:2187-2201

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	